

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1, 3-10, and 12 are pending in the application. No claim amendments are presented, thus no new matter is added.

In the outstanding Official Action, Claims 1, 3-10 and 12 were rejected under 35 U.S.C. § 103(a) as unpatentable over Lindsay et al. (U.S. Pub. 2002/0009070, hereinafter “Lindsay”) in view of Raith (U.S. Patent No. 6,711,408), in further view of Ida et al. (U.S. Pub. 2002/0082036, hereinafter “Ida”).

The outstanding Official Action rejected Claims 1, 3-10 and 12 under 35 U.S.C. § 103 as unpatentable over Lindsay in view of Raith, and in further view of Ida. The Official Action cites Lindsay and Ida as disclosing the Applicants’ invention with exception of the steps of receiving a handover history and selecting at least a handover destination candidate. In an attempt to remedy these deficiencies, the Official Action cites Raith and states that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine these references to arrive at the Applicants’ claims. Applicants respectfully traverse this rejection as Raith fails to teach or suggest the features of Claims 1 and 12 for which it is asserted.

Independent Claim 1 relates to a handover control method in which a mobile station is able to request handoff between base stations when a connection quality between the base station and a mobile station falls below a threshold. When the quality falls below the threshold, the communication control apparatus receives a handover request and a handover history from the mobile station; the handover history identifying origination and destination base stations of previous successful handovers of the mobile station. The communication

control apparatus then selects at least one handover candidate based, at least, on the received handover history.

Specifically, independent Claim 1 recites *inter alia*, handover control method, comprising:

... said communication control apparatus:  
***receiving a handover history from the mobile station,***  
said handover history ***identifying origination and destination***  
***base stations of previous successful handovers of the mobile***  
***station;***  
selecting a handover destination candidate ... based at  
least on the received handover history...

Independent Claim 12, while directed to an alternative embodiment, recites substantially similar features. Therefore, the arguments presented below are applicable for both independent Claims 1 and 12.

In addressing the above noted features of independent Claim 1, the Official Action cites Raith. Raith describes a method in which a location of a cellular phone is monitored, and the future path of the phone may be projected based on geographic path information stored within the network.<sup>1</sup> This stored path information is then used in conjunction with the location information received from the mobile device to determine a suitable handoff destination.

Raith, however, fails to teach or suggest ***receiving a handover history from the mobile station***, which identifies ***origination and destination base stations of previous successful handovers of the mobile station***.

In addressing this claimed feature, the outstanding Official Action relies on col. 6, lines 31-38 of Raith. Specifically, the Official Action quotes Raith, stating “frequently traveled routes are stored in a route server connected to the mobile communication network 10... The stored routes are used by the mobile communication network 10 to assist in making

---

<sup>1</sup> Raith, Figs. 3-4.

a handoff decision”.<sup>2</sup> Thus, the Official Action appears to be asserting that this “stored route information” is analogous to the “handover history”, as recited in independent Claim 1.

However, this “route information” is not *received from a mobile station*, but is instead stored within an MSC (14) or an HLR (15), or at any other location within the mobile communication network (10). Further, the “route information” is generated and stored within these network components using information generated within the network, and the only information received from the mobile device in Raith is location information. Therefore, this “route information” is not received from *received from a mobile station*, but is instead generated by the network (10) using trends in handoff data for all mobile devices to define “route information”, as discussed below. Thus, Raith fails to teach or suggest “*receiving a handover history from the mobile station*”, as recited in independent Claim 1.

Further, the “route information”, cited in the outstanding Official Action as corresponding to a “handover history” is not a *handover history*, as defined in Claim 1. Claim 1 specifically recites that the handover history *identifies origination and destination base stations of previous successful handovers of the mobile station*.

As discussed at col. 6, lines 23-30 of Raith, there may be any number of routes within a given mobile communication network (10), a route corresponding to a locus of points corresponding to a trail, such as a rotor highway, that is identified to the mobile communication network (10). Fig. 3 of Raith describes various routes (50, 63, 61, 60, 65, 67, etc.) which traverse through a specific mobile service area. The trends corresponding to handoffs of various mobile stations in the service area are used to define the route information stored in the mobile communication network (10) which is used to assist in making a handoff decision. However, this route information, as described at col. 6, lines 9-22 of Raith corresponds to geographic locations based on handoff trends within the system and

---

<sup>2</sup> Outstanding Official Action, p. 2.

does not include information relating to *origination and destination base stations of previous successful handovers of a mobile station*. Further, as noted above, Raith fails to teach or suggest that any information, aside from location information, is received and used by the base station to predict successful handoff destinations for the mobile device.

Therefore, Raith fails to teach or suggest “*receiving a handover history from the mobile station, said handover history identifying origination and destination base stations of previous successful handovers of the mobile station*”, as recited in independent Claim 1.

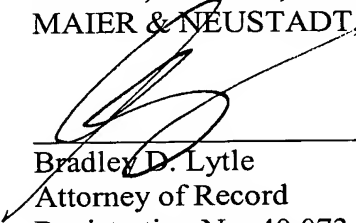
Further, as Raith fails to teach or suggest receiving a handover history including the above-noted characteristics, Raith further fails to teach or suggest “*selecting at least a handover destination candidate based at least on the received handover history*” also as recited in independent Claim 1.

Accordingly, Applicants respectfully request that the rejection of independent Claim 1 (and the claims that depend therefrom) under 35 U.S.C. § 103 be withdrawn. For substantially the same reasons given above with respect to independent Claim 1, Applicants also submit that independent Claim 12 patentably defines over the applied references.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1, 3-10 and 12 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



---

Bradley D. Lytle  
Attorney of Record  
Registration No. 40,073

Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)

Andrew T. Harry  
Registration No. 56,959